

CONTAINS A SCSI
UNITOR TOOL TOGETHER WITH
COMPLETE EXAMPLE SOURCE CODE
ON DISK

The SCSI Bus and IDE Interface

Protocols, Applications
and Programming

Friedhelm Schmidt

ADDISON-WESLEY



DISK INCLUDED

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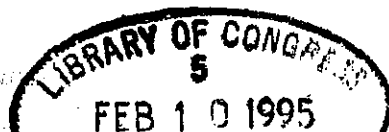
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Preface

The SCSI bus and IDE interface are without question the two most important interfaces for computer peripherals in use today. The IDE hard disk interface is found almost exclusively in the world of IBM PC compatibles. The SCSI bus, on the other hand, is designed not only for hard drives but also for tape drives, CD-ROM, scanners, and printers. Almost all modern computers, from PCs to workstations to mainframes, are equipped with a SCSI interface.

Both SCSI and IDE are ANSI standards. However, aside from the actual ANSI documentation, there exists almost no additional reference material to either specification. The purpose of this book is to fill that void with a clear, concise description of both interfaces. The essential terminology is introduced, while the commands and protocols are broken down in full. In the interest of economy the less important details and options have been omitted in certain cases. Often a specific section in the ANSI documentation will be cited for easy cross-referencing. After reading this book you should be in the position to easily understand relevant technical documentation, including the ANSI specifications themselves.

First and foremost, a thorough introduction to the terminology is in order. Especially with respect to SCSI, there is a deluge of terms and definitions that are used nowhere else or are used differently than in other computer domains. These keywords, which include signal names and interface commands, are typeset in small capital letters, for example `FORMAT UNIT`.

This book is intended for readers with a broad range of technical backgrounds and interests. Those working on the design of mass storage devices, for example, will find the protocol descriptions extremely useful. Readers writing software or device drivers may have other interests. They will find the hardware descriptions, such as that of the physical organization of a disk drive, very helpful.

This book is not meant to replace the ANSI documentation. On the other hand, those specifications are not meant to explain the technology, rather to define it. It is very difficult to find your way around in the original documentation without an understanding of the subject matter. The book's thorough, in-depth descriptions, along with index and glossary, make it the perfect tutor for IDE and SCSI, as well as a helpful guide to the ANSI literature.

Friedhelm Schmidt
February 1993

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